

Monthly Report for June 2016

Submitted July 1, 2016

Meetings

MSDE Data Summit

Center staff presented at the inaugural 2016 MSDE Data Summit, June 16-17, 2016. All presentations by Center staff were well attended by education professionals from across the state. Many of the Center presentations included staff from postsecondary institutions and local education agencies. Center staff received very positive feedback on the work presented. Participants provided excellent recommendations and suggestions to enhance the work done by Center staff.

Presentations from all presenters will be available on the [event website](#) in the next few weeks. Five Center staff presented on behalf of the MLDSC:

- Laia Tiderman, “*Get to know the Maryland Longitudinal Data System*”
- Mathew Uretsky, “*The Correlates and Consequences of On-Time Graduation*”
- Susan Klumpner, “*Workforce Outcomes in Maryland: Patterns among Students who earn a High School Diploma, Certificate of Completion, GED, and High School Non-Completers*”
- Xiaying Zheng, “*Characteristics and Employment Outcomes of Post-secondary STEM graduates in Maryland*”
- Angela Henneberger, “*High School Predictors of Needing Remedial Coursework in College*”

Governor's Chief Legislative Officer

On June 21st, Ross Goldstein, Laia Tiderman, Angie Henneberger, Terry Shaw and Dawn O’Croinin met with Chris Shank, Governor Hogan’s newly appointed Chief Legislative Officer and Ali Keane, Special Assistant. The purpose of the meeting was to provide Mr. Shank with an in-depth overview about the Center’s mission, governance and organization, system design (including security and privacy of the data), data inventory, research agenda and output. It was also a good discuss with Mr. Shank how the Center can be of assistance.

Staffing

The Center has two vacant IT positions remaining and has begun the process of filling them. The first step is to reclassify the positions to address needed job functions. One of the positions will serve as a business analyst to oversee dashboard development, develop business requirements for the dashboards, develop a comprehensive data dictionary, ensure data reporting standards are being met, and ensure data loading meets a defined set of quality assurance measures. The other position will serve as a data analyst responsible for creating data dashboards and reports, providing data analysis to support various agency functions, and providing support for data loading. Once the reclassification is approved a hiring freeze exception request will be submitted. Once that is approved the recruitment can begin.

Research

The research team has continued with preparation of the STEM workforce report, which will be submitted to MSDE by June 30, 2016 in fulfillment of the 2012 SLDS Grant. The team is currently working with the MLDS Center Executive Director and the Assistant Attorney General to finalize the suppression for the report before submission. Five members of the research team attended a 2-day short course sponsored by the Joint Program in Survey Methodology. The course was titled *Synthetic Data: Balancing Confidentiality and Quality in Public Use Files*. Additionally, several members of the research team attended the 2016 MSDE Data Summit.

Reporting Wage Data

Center staff from the Reporting & Data and Research Services teams have been working collaboratively on the best ways to report wages in MLDS Dashboards. Previous dashboards have reported an [annualized annual wage](#). Other options include reporting median wages, annualized median wages, or quarterly median wages. Additionally, the Research team has done extensive analysis on reporting average wages for individuals with four quarters of wages in each year.

Center staff have been in contact with Neil Ridley at the Georgetown University Center for Education and the Workforce and Jay Pfeiffer, formerly with the Florida Department of Education and an expert on postsecondary and workforce outcomes, for their knowledge on this topic. Additionally, staff have also been in contact with Washington's Education Research & Data Center (ERDC), for their expertise and experience in reporting wage data. The Jacob France Institute has been invited to the Center to share their expertise and continue the discussion on how to most accurately report wage data.

This results of these discussions will be incorporated into the current dashboard under design for Research Agenda Question #20: What are the workforce outcomes of Maryland high school non-completers?

Purging of Unmatched Wage Records

Center staff have spent significant time over the past few months determining the best procedures to implement provisions of the Data Sharing Agreement between MLDS Center and DLLR. The Data Sharing Agreement specifies:

- I. Transferred Student and Workforce Data must not be retained with personal identifiers for longer than such period of time as is necessary to match and/or de-identify data sets.
- II. Unmatched Confidential UI Data will be not be kept for more than 90 days, at which point it will be returned to DLLR or destroyed, as directed by DLLR.

Over the course of the past year the Center has been in a continuous cycle of loading and matching data. Through this process staff have worked diligently to ensure the validity of the data matching process (see 2015 Annual Report). This focus on perfecting the data matching means that DLLR data has been retained in the system since it was received. This month, staff began implementing the Procedures for De-linking and Purging Workforce Data (see attached).

Center staff have purged and destroyed all identities within the system that do not have an education record. Overall 73% of the DLLR records in the system were deleted. Staff have created a separate table to log the individual counts by term and year of all the purged records which will be maintained and updated on a regular basis. Below are the overall counts currently in the System:

Data Source	Count 12/1/2015	Count 6/29/2016	Percent Change
K-12 (includes teachers)	1,632,686	1,673,949	3%
MHEC	1,115,425	1,203,673	8%
DLLR	4,844,230	1,074,724	-78%
Net Total	6,366,937	2,559,477	-60%

System Management

The IT team has worked on the following tasks this month:

1. Testing the planned change over to a separate MLDS domain versus the centralized domain with MSDE.
2. Developing aggregate audit logs to comply with Data Security and Safeguarding Plan. Staff has developed an in-house application to allow easy analysis of the audit logs.
3. Continued work with the Department of Information Technology on the managed firewall service solution. The MSDE CIO has been involved to ensure the solution works seamlessly with the MSDE network environment.
4. Fully implemented the offsite backup with Amazon Web Services (AWS) and completed a test to restore operations from the backup.
5. Continued to work with the IT Security Auditor.

Database

Staff has identified and has begun to implement changes to the database schema to remove unneeded tables and simplify the design. These changes will make data loading and reporting easier for system users. This redesign has been a collaborative effort among all branches of the Center. The new schema has been reviewed by all parties and will be completed by July 15.

Data Partners

1. MSDE - The Center has received and completed loading all Assessments and the Student, Course, Grade, and Teacher data. The Center recently received the 2008-2016 staff data files and NSC 2015 files, which will be loaded soon.
2. MHEC – The Center is waiting to receive the Financial Aid Information System (FAIS) and the End of Term (EOTS) data files.
3. DLLR – The Center has received and loaded 2015 – 4th quarter files for LACES, NEDP, Claimants, Wage data, UI Tax data and GED data. The Center will be receiving and loading the 2016 1st quarter UI wage files.

4. MVA – The Center is now receiving and loading daily updates from MVA through secure SFTP server.

Dashboard and Website

The dashboard redesign is complete. Staff also made changes to the website to make navigating to the dashboards easier and very apparent from the home page.

There were two issues brought up at the Governing Board Meeting about the number of hits on the website. Currently the Center uses Google Analytics, which provides a monthly report on the number of hits on the website. The Board requested more information on:

1. The number of hits for each dashboard to provide insight into the level of interest in the different topics being presented; and
2. The searches users enter on the website to provide insight into what users are looking for when visiting the MLDS website.

To address the first request, staff configured and enabled the WebCenter parameters to collect dashboard page hits. To begin to address the second request, staff is working with DoIT to better configure the “Search” capabilities on the MLDS website. The new configuration will provide better searches of the MLDS site and will also provide the user with search results for Maryland.gov and the web in general. Staff is still researching the “Text Capture” option from “Search” field on the website.